5

10

## What is claimed is:

- 1. An interface system for interconnecting an audio output port of a personal computer to first and second audio input ports of a home stereo system, each of said first and second audio input ports being characterized by a substantially higher input impedance than an output impedance of said audio output port, comprising:
  - a housing;
- a first impedance transformer disposed within said housing for improving an impedance match between said audio output port and said first audio input port;
- a second impedance transformer disposed within said housing for improving an impedance match between said audio output port and said second audio input port;
- a multiple conductor elongated cable having a first coupling device at one end thereof and a second coupling device at another end thereof, said first and second coupling devices being dimensioned and arranged to establish respective electric signal paths through said cable by electrically interconnecting said audio output port and corresponding low impedance windings of said first and second impedance transformers; and

third and fourth coupling devices mounted on said housing, said third and fourth coupling devices being dimensioned and arranged to accommodate electrical connections between corresponding high impedance windings of said first and second impedance transformers and the first and second audio input ports of said home stereo system.

- 2. The interface of claim 1, wherein said first coupling device comprises a standard male miniature speaker connector.
- 3. The interface of claim 2, wherein said elongated cable comprises a section of low voltage, four conductor telephone cable, wherein said second coupling device is a male RJ11-type telephone connector, and wherein said first coupling device further includes a male RJ11-type telephone connector and a mating assembly having a female RJ11 jack and a male miniature speaker jack, said mating assembly, first coupling device and second coupling device being operative to establish respective electrical paths between said audio output port and at least three conductors of said four conductor telephone cable.

30

- 4. The interface of claim 2, wherein said elongated cable comprises a section of low voltage, four conductor telephone cable and wherein said second coupling device is a male RJ11-type telephone connector.
- 5. The interface of claim 1, wherein said third and fourth coupling devices are standard RCA female connectors, each electrically coupled to a high impedance winding of a corresponding one of said first and second impedance transformers.
- 6. The interface of claim 1, wherein an impedance ratio between said high impedance winding and said low impedance winding is between from 1000:1 to 5000:1.
  - 7. The interface of claim 1, wherein each conductor of said elongated multiple conductor cable has an impedance of between 4 and 16 ohms.
  - 8. A method of audibly reproducing audio signals originating at a personal computer using a remotely located home stereo system, comprising the steps of:

supplying, via an elongated low impedance cable, audio signals output by a personal computer to at least one impedance transformer remotely located from said personal computer, said impedance transformer being operative to improve an impedance match between an audio output port of said personal computer and at least one input audio port of said home stereo system; and

electrically coupling an output of said at least one impedance transformer to an input audio port of said home stereo system.

- 9. The method of claim 8, wherein said low impedance cable comprises a low voltage, four conductor telephone cable.
  - 10. The method of claim 8, wherein said electrically coupling step includes connecting a RCA male connector of a first end of a second cable to a high impedance winding of said at least one impedance transformer and a RCA male connector of a second end of the second cable to said at least one input audio port of said home stereo system.

25

30

10

- 11. The method of claim 8, wherein the elongated cable supplied during said supplying step is at least 25 feet along.
- 12. The method of claim 8, wherein the elongated cable employed during said supplying
  step comprises a four-conductor section of residential telephone cable having a transmission line impedance of 8 ohms.
  - 13. The method of claim 12, wherein the elongated cable employed during said supplying step has a male RJ11 connector electrically coupled to at least one end thereof.
  - 14. An interface system for interconnecting an audio output port of a personal computer to at least one audio input port of a home stereo system via an elongated low impedance cable having first and second coupling devices at first and second ends thereof, respectively, said at least one audio input port being characterized by a substantially higher input impedance than an output impedance of said audio output port, comprising:

a housing;

at least one impedance transformer disposed within said housing for improving an impedance match between said audio output port and said at least one audio input port;

a low impedance connector mounted on said housing and adapted to establish respective electrical signal paths through the cable by electrically interconnection said audio output port and a corresponding low impedance winding of said at least one impedance transformer; and

at least one high impedance connector mounted on said housing and adapted to establish a respective signal path between a corresponding high impedance winding of said at least one impedance transformer and said at least one audio input port of said home stereo system.

15. The interface system of claim14, wherein the home stereo system includes first and second high impedance audio input ports and wherein said interface includes first and second impedance transformers and first and second high impedance connectors, each of said first and second high impedance connectors being electrically coupled to a corresponding high impedance winding of a respective impedance transformer and electrically connectable to a corresponding one of said first and second high impedance audio input ports.